Responsiveness Summary Concerning EPA's February 14, 2002 Public Notice Proposing Determinations That TMDLs are Not Needed for 150 Waterbody/Pollutant Combinations in the State of Louisiana

Public Participation Activity Conducted

On February 14, 2002, EPA Region 6 published a notice in the Federal Register: Volume 67, Number 31, pages 6922-6925. In addition EPA Region 6 placed public notices in the legal advertising section of the New Orleans Times-Picayune, The Baton Rouge Advocate, and The Advisor (Lafayette, LA). Additionally, EPA Region 6 notified the plaintiff's in the Louisiana total maximum daily load (TMDL) lawsuit and the court of this action. This public notice requested comments from the public on EPA's proposed determinations that TMDLs are not needed for 150 waterbody/pollutant combinations, in the Ouachita and Calcasieu Basins, from what was then referred to as the 2000 Louisiana court-ordered list.

Summary of Actions

EPA has removed one waterbody/pollutant combination from this proposal based on comments received for Little River, subsegment 081602 for mercury. Although the basis for the original listing has been shown to be meeting WQS, EPA Region 6 has determined that it is not appropriate to move forward with a delisting for mercury based on this new information. Two additional listings have been added. It has been determined that LDEQ has submitted and EPA approved a TMDL for DO/nutrients for English Bayou in December 1997. Since there is a TMDL in place no further action is required for this listing.

Summary of Public's Comments:

The following persons provided written comments during the comment period:

Mr. Charles W. Stahr, P.E.
Technical Manger Gaylord Container Corporation
Bogalusa Mill Division
P.O. Box 1060
Bogalusa, LA 70429-1060

M. Dwayne Johnson
Kean, Miller, Hawthorne, D'Armond, McCowan and Jarman, L.L.P.
Counsel to Louisiana Chemical Association
P.O. Box 3513
Baton Rouge, LA 70821-3513

Richard T. Metcalf
Louisiana Mid-Continent Oil and Gas Association
801 North Boulevard, Suite 201
Baton Rouge, LA 70802-5727

Cynthia Goldberg
Gulf Restoration Network
P.O. Box 2245
New Orleans, LA 70176

Jeffrey Thomas
Esther Boykin
Earthjustice Legal Defense Fund
400 Magazine Street, Suite 401
New Orleans, LA 70130-2453

March 15, 2002

Ref: 08-889

Via Overnight Delivery

Ellen Caldwell
Environmental Protection Specialist
Water Quality Protection Division
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue
Dallas, Texas 75202-2733

RE: Clean Water Act Section 303(d): Availability of Proposed Determinations That Total Maximum Daily Loads (TMDLs) Are Not Needed; 67 Fed. Reg. 6922-25, February 14, 2002

Dear Ms. Caldwell:

The following comments and enclosed exhibits are provided for the Environmental Protection Agency's ("EPA's") consideration in regard to the above-captioned Federal Register notice.

General Comments

The EPA's proposed removal of some 150 waterbody/pollutant combinations from the Louisiana § 303(d) list, and the consequent avoidance of the requirement to prepare total maximum daily loads ("TMDLs") for those waterbody/pollutant combinations, is a highly significant action with serious implications for the environment of Louisiana and the health of her citizens.

All waters declared to be meeting water quality standards should meet all applicable criteria -- general or narrative, as well as numeric, for all designated uses. The information provided for review regarding these delistings is frequently insufficient to determine whether this is the case or not.

We object to all delistings based upon evaluative assessments by Louisiana Department of Environmental Quality ("LDEQ") staff or based upon LDEQ staff review of earlier evaluative assessments. The assessments and reviews of assessments were not provided for review for public comment. However, our experience during the litigation of Sierra Club, et al. v. Clifford, et al., Civ. Action No. 96-0527 (E.D. La. Oct. 1, 1999) suggests an intense agency bias toward

avoiding the requirement to establish TMDLs, which may inadvertently influence the preparation or review of evaluative assessments.

All of the plaintiffs' pleadings, exhibits, attachments, and other submissions filed in Sierra Club, et al. v. Clifford, et al., Civ. Action No. 96-0527 (E.D. La. Oct. 1, 1999) plus the Special Master's Reports and Court Orders, and all plaintiffs' previous comments regarding delisting -- all of which are in EPA's possession, are incorporated herein by reference. In addition, we incorporate herein by reference the State of Louisiana's § 319 list, § 304(l) list, and § 305(b) reports.

Any delisting must be supported by a reasoned explanation. Waterbody/pollutant combinations should not be removed from the § 303(d) list unless the waterbody is shown to be meeting the applicable water quality standards, including numeric and narrative criteria for its designated uses; or, if upon re-examination, the original basis for listing the waterbody/pollutant combination is demonstrated to be inaccurate. Many of the proposed delistings meet neither standard, and are not adequately justified. Examples of such are provided below.

Proposed Delisting of Waters Impaired by Dioxins and Priority Organics

Segment # 080101: According to the Ouachita Delisting Summary, this segment of the Ouachita River is proposed to be delisted for dioxins and priority organics. The rationale for this delisting states:

> The dioxin listing for this subsegment was reviewed and is provided in the EPA report "Data Assessment for water Bodies in the Ouachita River Basin listed for Dioxin on the Louisiana 303(d) List" (Attachment F). It was determined that this subsegment is currently meeting water WQS for dioxin."

It is noted that the version of the report provided to the public for review is entitled "DRAFT Data Assessment for Water Bodies in the Ouachita River Basin listed for Dioxin on the Louisiana Department of Environmental Quality's 1999 CWA Section 303(d) List," dated February 14, 2002, the same date as the Federal Register notice. Two questions arise. Is this draft document the same document on which the rationale for this delisting is based? And, if so, why is EPA relying on a draft report to make a delisting decision? Needless to say, the public should be provided the same documents for review during the public comment period that the agency is using to make its decision. In addition, there is no urgency to delist this waterbody/pollutant combination; thus, EPA is not compelled to rely on a draft to make the delisting decision rather than wait for a final report. Differences between a draft and a final document may be significant.

Response: *The draft document "A Data Assessment for Water Bodies in the Ouachita River Basin listed for Dioxin on the Louisiana Department of Environmental Quality's 1999 CWA Section 303(d) List" had been thoroughly reviewed by EPA Region 6 at the time of the proposal and was considered a" final" product. However, since the document was to be made part of the delisting package made available to the public, EPA decided not to finalize the document until after the close of the comment period. This would allow us to make revisions based on any*

comments received prior to finalizing the document. Indeed, some minor clarifications were made to parts of the document based on comments received.

The rationale for delisting this waterbody is clearly flawed. The draft report fails to rely on data from a disinterested party to support the recommendation to delist this waterbody. Rather, the draft report reviewed and relied upon data from the Georgia Pacific pulp and paper mill, an upstream discharger. Moreover, the data considered is solely fish tissue data from specimens which were collected outside this subsegment, albeit upstream. No water quality data, whatsoever, is presented or considered in the draft report's discussion of segment # 080101. If, unlike here, the fish tissue data were from a source having no potential conflict of interest, and, also unlike here, the fish tissue data were taken from fish collected in the segment under consideration, then, perhaps a conclusion could have been reached that any fish consumption advisory may be lifted. Here, however, the draft report has made an unsubstantiated leap to recommend that no TMDL need be prepared for dioxin for this segment of the Ouachita River. While we, too, would like to be assured that this waterbody segment is not impaired by dioxin, and is meeting water quality standards, the analysis in the draft report fails to demonstrate that water quality standards for dioxin are now being met in this segment.

Response: *As a point of factual clarification, no fish consumption advisory for dioxin has been issued for this subsegment. It was listed due to its location downstream from Georgia Pacific-Crossett, a probable discharger of dioxin. As reflected in fish tissue data, effluent controls established for this discharger have essentially eliminated the source of dioxin from this system.*

Georgia Pacific conducted the fish collection activities as part of their NPDES permit requirements. These samples were taken to verify compliance and to serve as the basis for regulatory decisions related to their permit. Therefore the sample data were submitted to the Arkansas Department of Environmental Quality and the EPA for review. Given that the fish samples were acceptable to these agencies, with no exception taken to the collection or analysis procedures, it is appropriate to use them to assess dioxin concentrations in fish for the Ouachita River.

Furthermore, although the fish were collected by Georgia Pacific, the actual dioxin analyses were performed by Triangle Laboratories, Inc. Triangle Laboratories is an independent, contract laboratory that has done work for a number of clients, including several government agencies. Furthermore Triangle Laboratories has performed over 150,000 dioxin analyses and has a proven track record of providing legally defensible analytical results.

The fact that the fish samples were collected in Arkansas does not preclude them from use in assessing the condition of subsegment 080101, which begins immediately below the Arkansas state line. The upper limit of the subsegment reflects only a political boundary and not a physical barrier to fish migration and movement. The fish were collected immediately upstream of subsegment 080101, and it is highly likely that they represent the same populations that inhabit subsegment 080101. Additionally, there are no identified dioxin sources in subsegment 080101 and the only historical source of dioxin to the subsegment is the Georgia Pacific mill. Contaminant concentrations decrease downstream from the source (the mill in this case) due to dilution from run-off and dispersion. Thus, fish samples taken in greater proximity to the mill

are likely to have higher tissue concentrations, than fish collected further downstream, and thereby provide a more conservative assessment of dioxin impairment.

Water quality data related to dioxin concentrations in the water column were not arbitrarily excluded from the assessment report, they simply do not exist for subsegment 080101. Dioxin is not commonly measured in water since ambient concentrations, even in extremely polluted water bodies, are usually well below the method detection limits for dioxin congeners. Furthermore the method detection limits (for the various dioxin congeners) are also higher than the water quality standard (for a dioxin/furan toxic equivalent concentration), and would be unable to adequately resolve whether or not the water body is in violation of the standard. Although high volume sampling techniques can be used to detect lower concentrations, the cost and complexity of these techniques make them impractical for widespread application. For this reason, the fish tissue screening criteria was developed and is widely used to assess dioxin impairment. The fish tissue screening criteria was developed with the same risk-based procedure as the water quality standard, but is actually more conservative since the risk level specified by LDHH is an order of magnitude lower than the risk level used by LDEQ in developing the water quality standard.

Further, it is noted that this segment of the Ouachita River appears on the Court-ordered Louisiana § 303(d) list as being impaired by priority organics including dioxin. Yet, no effort has been made in the draft report to address the priority organics other than dioxin although the proposed delisting would result in no TMDL being prepared for either dioxin or any other priority organic. In the absence of objective, cite-specific data supporting a decision to delist this segment for dioxin, in the absence of <u>any</u> data supporting a decision to delist this segment for other priority organics, and in the absence of data necessary to demonstrate that this segment meets water quality standards for dioxins and priority organics, this proposal to delist is arbitrary and capricious, and an abuse of discretion, in violation of the Administrative Procedure Act, ("APA"), 5 U.S.C. §§ 551, <u>et seq</u>.

Response: *Waterbody evaluations are not based solely on information provided by LDEQ. However, EPA believes that it is reasonable to believe that this water was originally listed based solely on dioxin concerns. EPA guidance for conducting waterbody assessments has always considered an evaluative approach to waterbody assessments to be reasonable and appropriate. EPA guidance on assessing waters for designated uses allows for evaluative assessments of waters based on information other than water column data. This guidance considers the reasonable potential for a pollutant to be present as a justifiable rationale for an evaluative assessment. In the case of the Ouachita River subsegment 080101 a discharger inventory was conducted and only one potential discharger of any organic pollutant was identified. Total phenol is identified as a permitted pollutant in the Sterlington Chemical NPDES permit. However, it is a low-level constituent of a small volume discharge .005 mgd. Because the criterion levels for phenols are very high 4,600mg/L. There is no reason to suspect that phenols would be present at anywhere near criterion levels.*

Proposed Delisting of Waters Impaired by Mercury

EPA proposes to delist one waterbody/pollutant combination in the Ouachita Basin and ten waterbody/pollutant combinations in the Calcasieu Basin for mercury. In regard to mercury contamination in Louisiana, generally, and in these two basins, in particular, see exhibit A, excerpts from the State's 2001 mercury report. Each of these waters is designated for both primary and secondary recreation, and for fish and wildlife propagation. In addition, three segments (#s 080501, 080605, and 081602) are designated outstanding natural resource waters. Yet, virtually no information was provided to the public for review regarding the rationale for delisting these eleven waters for mercury. Our review suggests that, overall these delistings for mercury are not adequately justified.

Each mercury delisting states that there is no fish advisory on that segment. Yet, no information is provided to indicate that each of those segments has actually been sampled and the need for a fish advisory ruled out. To the extent that EPA proposes to delist such waters relying on the absence of a fish advisory, it is arbitrary and capricious and an abuse of discretion.

Segment # 030702: It is not apparent on its face how a review of "historical" water quality data can demonstrate that this segment is "currently" meeting water quality standards for water column mercury, as asserted in EPA's rationale. The EPA rationale correctly states that there is not currently a mercury fish consumption advisory for this segment. However, although the segment numbers used for the § 303(d) list do not correspond precisely to the site number used for sampling for fish advisories, it is noted that the State's 2001 mercury report (Ex. A; site # 0131) reflects that at least two of the fish tissue samples taken from this waterbody had mercury above the .5ppm threshold for a mercury fish consumption advisory. To delist on the basis of historical water quality data, in the face of fish tissue data of concern, is arbitrary and capricious, and an abuse of discretion. The prudent course of action, conservative of human health and the environment, would be to conduct current water quality evaluations before proposing to delist this segment.

This is particularly true in light of the fact that segment 030702 is within the Calcasieu Basin, which is well known to be the location of numerous industrial dischargers, and which is the subject of much concern, research, and remedial planning. In this regard, and for additional information regarding all of the Calcasieu basin delistings, see exhibits, B, C-1, C-2, and C-3. If ever synergistic effects of multiple pollutants should be considered, it is within the waters of the Calcasieu basin, and it is now.

Response: *EPA policy on listing waters based on fish tissue recommends that states list, at a minimum, those waters where a fish or shellfish advisory demonstrates non-attainment of water quality standards (i.e., the advisory or classification is based on tissue data, the data are from the specific waterbody in question and the risk assessment parameters of the advisory or classification are cumulatively equal to or less protective that those in the water quality quality standards). If data for a particular waterbody meet these recommendations EPA policies would*

Require that that waterbody be listed. The State of Louisiana has not yet made such a determination for the specific waters mentioned. Please see additional comments.

Segment # 081602: The rationale for delisting this water indicates that there is no fish advisory for this segment, Little River - From Bear Creek to Catahoula Lake (Scenic). However, there is a fish advisory for Little River. Ex. A. According to the State's mercury report, each site in Little River that was sampled and tested for a potential fish advisory has eight or nine samples above the .5 ppm fish consumption advisory level, including several above the 1.0 ppm FDA level. Ex. A, p A-59, 60. Based on the limited information available for review, it is not clear how it can be said that there is no fish advisory for Little River. To the extent that this segment may be a portion of Little River for which no sampling has been done for fish advisory purposes, then it is premature to delist the segment.

Response: *Based on comment received EPA has reevaluated the original request for delisting for this subsegment. LDEQ did submit new information supporting that water column concentrations of mercury are currently being met. Since water column exceedance was the basis for the original listing EPA proposed the delisting on this basis. However, as was brought to our attention in these comments, there was a fish advisory posted for this subsegment of the Little River in November, 2000. This was after the court ordered list was established and although EPA does review information posted on the LDEQ mercury advisory website this advisory was inadvertently overlooked. Although the basis for the original listing has been shown to be meeting WQS, EPA Region 6 has determined that it is not appropriate to move forward with a delisting for mercury based on this new information. EPA Region 6 has reached a mutually agreeable resolution with plaintiff's on this issue.*

Other Segments: The data in the State's mercury report must be considered before proceeding with the mercury delistings. The report indicates, for instance, that a number of the waterbodies proposed for delisting have not even been sampled yet to determine if a mercury fish consumption advisory is needed. Waters should not be delisted simply because a segment has no fish consumption advisory, when such an advisory may be needed. State water quality standards require that for toxic substances, such as mercury, (as well as other metals proposed in this delisting action -- cadmium, copper, and lead), the impacts of such in the underlying sediments must be considered. 33 LAC 11:1113.B.5. The data provided for public review does not reflect such consideration, either in regard to mercury or the other metals.

Also, where there is any question as to whether the site in which fish advisory sampling was done is within the segment at issue, EPA should obtain additional information. For example, segment # 080201, the Ouachita River -- Columbia Lock and Dam to Jonesville, is proposed to be delisted for mercury. The Ouachita River, LA/AR border to lock at Columbia, has a fish consumption advisory for mercury. Ex. A. The mercury report indicates that four sites on the Ouachita River have been sampled for fish advisory purposes. Ex. A, p A-60, 61. Each of the four sites had specimens with elevated levels of mercury in excess of the .5 ppm fish advisory standard and the 1.0 FDA standard. Because of a lack of information, we are unable to compare those sites with the segment to be delisted, to assure that the segment to be delisted neither has, nor should have, a mercury fish consumption advisory. EPA, however, should reconcile this information before proceeding with delisting.

Response: *The State of Louisiana has established a fish tissue monitoring program and a mechanism for evaluation and action based on this information. The State's program is known to EPA Region 6 and we do not have concerns with their process. Sampling is ongoing and the assessment methodology utilizes a risk-based approach. EPA policy on 303(d) listing for fish tissue advisories addresses waters for which the state has issued a consumption advisory. This guidance states, "For purposes of determining whether a waterbody is impaired and should be included on a section 303(d) list, EPA considers a fish or shellfish consumption advisory, a NSSP classification, and the supporting data, to be existing and readily available data and information that demonstrates non-attainment of a section 101(a) "fishable" use when:*

1. *the advisory is based on fish and shellfish tissue data,*
2. *a lower than "Approved" NSSP classification is based on water column and shellfish tissue data (and this is not a precautionary "Prohibited" classification or the state water quality standard does not identify lower than "Approved" as attainment of the standard)*
3. *the data are collected from the specific waterbody in question and*
4. *the risk assessment parameters (e.g., toxicity, risk level, exposure duration and consumption rate) of the advisory or classification are cumulatively equal to or less protective than those in the State, Territory, or authorized Tribal water quality standards.*

Listings where advisories have not been issued are not covered under this guidance.

Proposed Delisting of Waters Impaired by Turbidity

Attachment A in support of the proposed delistings states at page 5, in reference to six segments in Table 1, that "[c]riteria for turbidity are not available for all water bodies; therefore, no assessment of the turbidity data could be made at this time." As we understand it, the Louisiana water quality standards provide a "catch-all" general criterion for turbidity for all waters not otherwise covered, except designated intermittent streams. 33 LAC 11:1113.B.9. Are the six segments in question designated intermittent streams?

Response: *Although LDEQ did make such a statement in their submittal, EPA has taken a broader interpretation in our evaluation of waters for turbidity. LDEQ interprets their standards very literally, stating that turbidity criterion are only established for the main stems of the specifically named waters. While this is defensible based on the language found in their standards (33 LAC 11:1113.B.9), EPA was faced with a need for a quantifiable method of evaluation for subsegments that were listed as impaired for turbidity. In a somewhat broader interpretation of the Louisiana WQS, EPA believes that it is reasonable and appropriate for this criterion to be applied to major tributaries within the watershed as well. The reasoning for this interpretation is that if the criterion is met in the tributaries this will provide for meeting the criteria for the named waterbodies they are connected with. EPA conducted a complete evaluation of all subsegments in the basin. Using this approach some subsegments were determined to be meeting the criteria and if appropriate were proposed for delisting. In addition there were subsegments that were found that were not meeting this criterion. Those waters not*

meeting the criterion were addressed in the EPA TMDL "Ouachita River Basin TMDLs for TSS, Turbidity and Siltation (13 subsegments)" and the document "English Bayou Turbidity and Suspended Solids."

We appreciate an opportunity to comment on proposed delistings. However, a very large number (150) waterbody/pollutant combinations were proposed here for delisting, the documents needed for review were not promptly made available to the public, and considering the magnitude of this delisting, the time provided by EPA for public review was far from adequate. See Ex. D, Ex. E. Thus, the comments provided above should not be considered a comprehensive list of the errors in the proposed delistings or a comprehensive statement of the concerns about the delistings, but merely illustrative of types of errors and concerns for which the entire delisting proposal should be reviewed.

Response: *EPA recognizes the issues raised with respect to providing appropriate data to the public. EPA continues to refine our mechanisms for providing this information to support our decisions. EPA will certainly consider comments in this document that would improve the process in future actions.*

Very truly yours,

Esther Boykin

Enclosures:

Exhibit A	Excerpts from Mercury Contaminant Levels in Louisiana Biota, Sediments, and Surface Waters 1994 - 2000, Louisiana Department of Environmental Quality, September, 2001.
Exhibit B	Contamination Extent Report and Preliminary Injury Evaluation for the Calcasieu Estuary, prepared for the National Oceanic and Atmospheric Administration, June 16, 1997.
Exhibit C-1	Phase I Sampling and Analysis Plan for Remedial Investigation/Feasibility Study of Bayou Verdine Area of Concern, Calcasieu Estuary Cooperative Site, Lake Charles, Louisiana, October, 1999.
Exhibit C-2	Draft Phase I Sampling and Analysis Plan for Remedial Investigation/Feasibility Study of Bayou D'Inde Area of Concern, Calcasieu Estuary Cooperative Site, Lake Charles, Louisiana, November, 1999.
Exhibit C-3	Draft Phase I Sampling and Analysis Plan for Remedial Investigation/Feasibility Study of Upper Calcasieu River Area of Concern,

Calcasieu Estuary Cooperative Site, Lake Charles, Louisiana, December, 1999.

Exhibit D — Printout from EPA website regarding attachment B of the documents supporting the delisting proposal; email correspondence exchange between Esther Boykin and Willie Lane, dated March 12 - 13, 2002.

Exhibit E — Email correspondence dated March 14, 2002 from Linda Adams to Cynthia Goldberg.

Incorporated by reference:

1) LAC, Title 33, Part IX, Chapter 11.

2) State of Louisiana § 319 list, § 304(l) list, and § 305(b) reports.

3) All of the plaintiffs' pleadings, exhibits, attachments, and other submissions filed in Sierra Club, et al. v. Clifford, et al., Civ. Action No. 96-0527 (E.D. La. Oct. 1, 1999) plus the Special Master's Reports and Court Orders, and all plaintiffs' previous comments regarding delisting -- all of which are in EPA's possession.

March 18, 2002
Ref: 08-889

Via Facsimile 214-665-6490
Ms. Ellen Caldwell
Environmental Protection Specialist
Water Quality Protection Division
U.S. Environmental Protection Agency, Region IV
1445 Ross Avenue
Dallas, TX 75202-2733

RE: Clean Water Act § 303(d): Availability of Proposed Determinations That Total Maximum Daily Loads (TMDLs) Are Not Needed; 67 Fed. Reg. 6922-25, February 14, 2002

Dear Ms. Caldwell:

The following comments are provided for the Environmental Protection Agency's ("EPA's") consideration in regard to the above-captioned Federal Register notice. These comments supplement those submitted by Earthjustice on March 15, 2002.

General Comments on the
Proposed Delisting of Waters Impaired by Pesticides

EPA's proposed removal of approximately 150 waterbody/pollutant combinations from the Louisiana § 303(d) list is a matter of considerable public concern. The resulting elimination of total maximum daily load ("TMDL") requirements for waterbodies impaired by metals, dioxin, and pesticides, demands that "delisting" determinations be void of clear error in agency judgment, abuse of discretion, or violation of applicable safeguards. This duty of care is all the more apparent when, as here, EPA seeks to delist such a considerable number of waterbodies, all within two water basins.

Every candidate waterbody in the Ouachita River Basin is designated for primary or secondary contact recreation, and propagation of fish and wildlife, with the Ouachita River, segment #080101, additionally designated as a primary drinking water supply. Given these designations, a proposal to delist these waters for pesticides raises concerns directly applicable to human health and aquatic life protection, and warrants heightened scrutiny of the criteria attainment determinations underlying such proposals.

In regard to the proposed pesticide delistings, according to the Ouachita Delisting Summary, the offered rationale for all eligible waterbody segments states: "Based on available data, including *sampling conducted by EPA* in 2001, this waterbody is currently meeting WQS for *pesticides*." (Emphasis added.) In making this statement EPA is declaring that all of the eligible waterbodies currently meet water quality standards ("WQS") for each of the chemical impairments included under the umbrella term "pesticide." However, several aspects of the

documentation provided for public review raise doubt that the proposed segments, in fact, satisfy WQSs for "pesticides."

Response: *As given in the detailed assessment document attached as Appendix B of the TMDL document, EPA did evaluate pesticides reasonably expected to be present in these basins for their potential impact to both human health and aquatic life. This process of developing a list of "pesticides of concern" (POCs), those pesticides reasonably expected to be present in the Ouachita Basin, is well documented in Appendix B-2 of the TMDL. For these basins, 28 individual pesticides were identified for inclusion on the POC list. Delistings were proposed only where all 28 POCs were found to be fully supporting based on the assessment methodology outlined in the TMDL.*

Incompleteness of the EPA Pesticide Study and the Supporting Documentation

The completeness of the underlying 2001 EPA Pesticide Study and supporting documentation for pesticide delisting is questionable. Attachment D, which summarizes the information made available for review regarding the pesticide delisting, consists of sampling data for certain pesticides taken over a six-month period in 2001 from Ouachita segments. In addition, Attachment D lists Ouachita River Basin segments exceeding chronic levels for each tested chemical and cites the data sources illustrating these exceedances.

Of particular concern is that the sampling data, an apparent significant basis for the proposed delistings, includes only five pesticides: (1) Atrazine; (2) Carbofuran; (3) DDT; (4) Methyl Parathion; and (5) Toxaphene. This is despite the fact that the State of Louisiana and the U.S. Geologic Survey ("USGS") identify over 76 pesticide chemicals potentially existing in Louisiana waters.[1] Moreover, National Water Quality Assessment ("NAWQA") data compiled by USGS reveals that on average, nationwide, more than 50% of streams sampled contained five or more pesticide chemicals, and an additional 15% contain ten or more.[2] In addition, Attachment D includes no evidence of or results from a six-month sampling for Atrazine, yet lists Big Creek, subsegment #08903, as the only site exceeding WQS for that chemical. Finally, regarding the offered "exceedance" list, several segments are labeled as exceeding or below chronic target levels solely on the basis of cited Louisiana Department of Agriculture and Forestry ("LDAF") and National Water Quality Assessment (NAWQA) data. However, the attachment does not provide any data summaries of these findings, which are necessary for meaningful review and comment.

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[1]LAC 33:IX.1113, Table 1; *see also* United States Geologic Survey, *"Pesticides Analyzed in NAWQA Samples: Use, Chemical Analyses, and Water-Quality Criteria."* August 20, 1999, available at http://ca.water.usgs.gov/pnsp/anstrat.

[2]Gillion, Robert, Jack E. Barbash, et al., *"Testing Water Quality for Pesticide Pollution: U.S. Geological Survey investigations reveal widespread contamination of the nation's water resources,"* Environmental Science & Technology, at 168 A. available at http://pubs.acs.org/hotartcl/est/99/apr/test.html#0043-99gill4.ev.

Response: *EPA does not contest that the State of Louisiana and the USGS may have identified over 76 pesticide chemicals potentially existing in Louisiana waters; however, this does not mean that all 76 pesticide chemicals would be used in the Ouachita Basin. EPA consulted with the Louisiana Department of Agriculture and utilized its databases of pesticides used for certain crop types to identify the list of POCs. LDAF routinely monitors quarterly for many of these commonly used pesticides and others used in conjunction with the crops being produced. LDAF generates a quarterly report showing only those pesticides whose concentrations exceed the detection limit. Detection limits for these pesticides were evaluated and if they were not appropriate to make a determination additional monitoring was done. The EPA pesticide study was designed to address any pesticides for which the LDAF monitoring detection limits were not below the established target values. This effort included atrazine, diazinon, methyl parathion, molinate and carbofuran. In addition, whole water column samples were analyzed for the pesticides for which LDEQ has adopted water quality standards, and LDAF monitoring did not address. This list includes aldrin, chlorodane, DDT, DDD, DDE, dieldrin, endosulfan, endrin, heptachlor, lindane and toxaphene. Other available data such as USGS NAWQA data was also evaluated. Using this combination of data sources, 28 pesticides were evaluated against, freshwater aquatic life and human health protection targets derived from Louisiana water quality standards, or numeric targets developed by EPA.*

The last data set in Attachment D contains the results from a 6-month EPA study for atrazine. The two-page table in Appendix D is a summary of all the data considered (EPA study, LDAF, and NAWQA) for the support determination and reports only those pesticides that have exceeded the WQS or established numeric targets. These tables do not include data results that were fully meeting the appropriate concentrations. Other pertinent information such as subsegment, site description, station, data source, date, lab value and numeric target value is also given. In the example cited by the commenter, Joe's Bayou and Big Creek each have one exceedance above the atrazine chronic target level in the EPA study. In the LDAF monitoring data, Big Creek also showed an exceedance above the atrazine chronic target level. Using all available data, Big Creek had two exceedances and therefore was found to be not supporting for atrazine. However, Joe's Bayou had only one exceedance, Joe's Bayou was determined to be fully supporting. EPA will provide more complete data summaries in future actions.

On its face, the pesticide profile supporting proposed delistings within the Ouachita River Basin is woefully incomplete. With so many pesticides not evaluated or, alternately, the results of such tests not provided, the public can only surmise that less than 7% of pesticide chemicals potentially existing in the Ouachita River Basin were actually tested by EPA. This contravenes any assertion that eligible segments are in compliance with WQS for pesticides given that the term "pesticides" encompasses far more than the five chemical impairments discussed in Attachment D. Moreover, among the chemical impairments assessed, the omission of Atrazine data renders the data supporting proposed delisting all the more incomplete. Finally, mere citations to LDAF and NAWQA data as additional or sole evidence that segments are in exceedance or compliance is not sufficient. If in fact such data encompasses pesticide chemicals beyond those tested by EPA, supporting documentation should include a data summary similar to

the EPA study if such data is to be used as a basis for potential delisting, and if the public is to have any means of conducting a thorough and effective appraisal of EPA's proposed delistings.

Response: *For the Ouachita basin, a total of 28 pesticide chemicals were evaluated. These represent those pesticide chemicals evaluated in the NAWQA study, EPA study, and those that have been reported in the LDAF ambient monitoring data reports. In addition to those pesticides previously mentioned, others include alachlor, bladex, bromacil, clomazone, dimethipin, metolachlor, metribuzin, norflurazon, flurometuron and prometryne. Concentrations reported for these pesticides in the USGS and LDAF data were well below the numeric targets. Again, the 2-page table in Appendix D only summarizes the information pertaining to pesticides whose concentration exceeds the established numeric targets. We are sorry for the confusion created in using this format. We will consider revising the format in future TMDLs.*

Assurance of Below Chronic Levels for DDT & Toxaphene

Lacking explanatory information in the supporting documentation provided to the public for review, we must assume that here the term "reporting limit" is synonymous with detection limit. A second concern as to whether proposed segments, in fact, satisfy WQS for "pesticides" is the discrepancy between chronic-level criteria and testing limitations for both DDT and Toxaphene. Water-quality criteria are benchmarks by which EPA determines whether pesticide levels in a waterbody are at concentrations at which there is some estimated significant risk of adverse effects to aquatic organisms or humans. Based on Attachment D, for each of the five chemicals assessed, the "chronic numeric target," a concentration demonstrating negative effects upon long-term exposure, is the criterion basis for whether Ouachita River Basins segments are in exceedance and therefore should not be delisted.

For the toxics DDT and Toxaphene – both considered pesticides for the purposes of delisting -- the chronic numeric target is considerably below the reporting limit (limit of detection) for these chemicals. For example, chronic-level concentrations of DDT for human health, 0.00019 ug/L, are nearly ten times lower than the amount reportable through EPA studies, 0.001-0.002 ug/L. Similarly, for Toxaphene, the chronic concentrations for aquatic life and human health, 0.0002 ug/L and 0.00024 ug/L, respectively, are 300 and 250 times lower than the reporting limit, 0.060 ug/L. Consequently, some segments may contain DDT levels ten times higher and Toxaphene concentrations nearly 250 times greater than human chronic levels, unbeknownst to EPA studies.

Given this substantial gulf between reporting limits and chronic concentrations, a scientifically accurate statement that these segments are below chronic levels for DDT and Toxaphene is simply not possible. Moreover, combining this uncertainty with historical evidence that these toxins have been present, and a lack of bottom sediment samples, it cannot be reliably stated that these segments are meeting WQSs for DDT and Toxaphene.

Because EPA includes both chemicals underneath the umbrella term "pesticide," serious reservations exist as to whether the Ouachita River Basin segments are, in fact, in compliance with WQS for "pesticides," to the extent that the term encompasses DDT and Toxaphene. As

stated above, such a large-scale proposed delisting affecting a single river basin demands the highest caution by EPA. That said, given an apparent lack of certainty as to DDT and Toxaphene levels, EPA is urged to err on the side of caution and not to delist segments for "pesticides" until such time as reporting levels can more accurately assess whether river segments are below chronic levels for these toxics.

Response: *EPA acknowledges that the criteria for DDT and Toxaphene are below the detection or reporting limit for laboratory analyses. Criteria for toxic substances may be found in the Louisiana Water Quality Standards at LAC 33:IX.1113.C.6. Paragraph (e) from this document reads as follows: "For determination of criteria attainment in ambient water where the criteria are below the detection limit, then no detectable concentrations will be allowed. However, for dilution calculations or water quality modeling used to develop total maximum daily load and wasteload allocations, the assigned criteria, even if below the detection limit, will be used." Applying this language to the data collected by EPA for DDT and Toxaphene, values below the reporting limit are considered a no detect and therefore, the waterbody is meeting the WQS.*

"Pesticide" Characterization is Overly Broad & Misleading

The characterization of five distinct chemical impairments as "pesticides" is a broad generalization, and potentially misleading in terms of a segment's compliance with necessary WQS. Stating that a segment is "meeting WQS for pesticides*,"* suggests to the public that one WQS exists by which river segments are measured, when, in fact, numerous water-quality criteria exist, set at different levels and with different reporting limits. See USGS, "Pesticides Analyzed in NAWQA Samples: Use, Chemical Analyses, and Water-Quality Criteria." August 20, 1999, available at http://pubs.acs.org/hotartcl/est/99/apr/test.html#ref1. Moreover, individual pesticide chemicals vary in degree of toxicity and potential impact to aquatic life and human health. Labeling the impairment of a waterbody simply as "pesticide" inadvertently masks these important differences from public view.

EPA's characterization of DDT and Toxaphene underscores this problem. On the face of the proposed delisting, these chemicals are labeled as "pesticides," indistinguishable from other pesticide-chemicals, yet both are "toxic substances" with extremely low chronic numeric targets, and having considerable gaps between their respective chronic levels and reporting limits. As discussed, the doubt over whether the Ouachita River Basin segments comply with WQS for these chemicals renders impossible any reliable generalization of "pesticide" compliance when these chemicals are lumped in with others as "pesticides." Most importantly, though, by not separating these chemicals within the proposed rulemaking, the public may fail to observe and appraise the significant issues and questions unique to these "pesticides" and vital to an effective review of any proposal to delist waterbodies for these substances.

Finally, EPA's lumping of multiple chemicals under the term "pesticide" gives the public no sense of whether a segment must be in compliance with WQS for all pesticide-chemicals, a majority, or certain select chemicals. The broad classification reduces the amount of information available for appraising a segment's compliance with particular pesticide chemicals and the methodology used to determine whether a segment is in compliance or exceedance.

For example, EPA data summaries in Attachment D illustrate various segments were in "exceedance" of one, two, three, or four of the chemicals assessed, but provides no guide as to what point EPA considered a segment ineligible for delisting at a certain number of exceedances. (See the discussion below on Segment #80202 Bayou Louis -- proposed for delisting despite an exceedance for Methyl Parathion). In addition, EPA offers no information explaining why data spikes in excess of chronic levels for some segments, apparently led to ineligibility for delisting, while with others the spikes seem inconsequential. (See the discussion below on Segment #80202 Bayou Louis -- proposed for delisting despite an exceedance for Methyl Parathion.)

In contrast to EPA's separate labeling of dissolved metals (e.g., mercury, lead . . .) and other impairments upon which proposed delistings are based, the blanket characterization of multiple pesticide-chemicals simply as "pesticides" provides an insufficient level of detail, rationale, and support data. To avoid confusion and the inadvertent masking of issues key to reviewing proposed delistings, it is urged that EPA at least treat separately those chemicals, such as DDT and Toxaphene, that raise concerns independent of other "pesticides."

Response: *We agree that a listing for a broad group of pollutants is over broad and misleading. Eighteen subsegments in the Ouachita River Basin were included on the 1999 court-ordered Louisiana 303(d) list as not fully supporting the water quality standard with "pesticides" listed as the cause of nonsupport. These original assessments were based largely best professional judgment, often without the benefit of quantitative data. The rationale for many of these listings was the fact that since the predominant land use is agriculture, then the possibility for pesticide impairment in the watershed existed. This is further supported by the fact that no specific pesticide was identified as the problem, only pesticides in general. However, the listings still remain and must be addressed.*

It is not possible to develop a TMDL for a generic listing of pesticides. Therefore, one of the first steps was to establish which, if any, pesticide may be contributing to impairment of the listed subsegments. LDEQ has adopted numeric criteria for a number of pesticides, including; aldrin, chlorodane, DDT, TDE (DDD), DDE, dieldrin, endosulfan, endrin, heptachlor, lindane and toxaphene. It was recognized that this list of pesticides is very limited and does not fully represent concerns from currently used pesticides. In order to clarify this situation, a primary presumption was made that the listings were based on concerns that the LDEQ water quality standard addressing no toxics in toxic amounts was being violated. A procedure for identifying current pesticide concerns was developed using LDAF pesticide monitoring program information.

The LDAF, the State agency responsible for control of pesticides issues in Louisiana, has developed a methodology for monitoring of pesticides in watersheds. The LDAF monitoring program targets pesticides for monitoring by establishing crop types for a given area and then a generating a list of the pesticides approved for use on those crops. EPA determined that this approach would be representative of pesticides reasonably expected to be present and would define the basic starting point list for further pesticide evaluations.

Once a pesticide has been identified, a numeric target value for that pesticide which distinguishes between the impaired and unimpaired state of the waterbody must be established. A number of the identified pesticides do not have state adopted water quality standards. In the absence of numeric criteria, a numeric target needed to be developed These numeric target values do not represent a water quality criterion or standard; rather, they are a numeric target used to assess if a water body would be reasonably expected to be impaired based on the state's no toxics in toxic amounts narrative criterion. These values have been determined using existing EPA criteria, EPA draft criteria if in agreement with LDEQ and LDAF, or in accordance with procedures outlined in the State of Louisiana Water Quality Standards for toxics and supporting documentation submitted to EPA Region 6. A more comprehensive description can be found in Appendix B-2 "A Rationale for Development of Screening Levels in Louisiana 303(d) Streams Listed for Pesticides of the Total Maximum Daily Load (TMDL) for Selected Pesticides in the Ouachita River Basin.

Specific Comments: Segment #80202 Bayou Louis

Bayou Louis, subsegment #80202, is listed among the Ouachita River Basin segments proposed for delisting on the basis of "pesticides." It is proposed for delisting despite the fact that the segment demonstrated an exceedance of the chronic numeric target for Methyl Parathion in the August 2001 sample. The exceedance, 0.031 ug/L reported with an established 0.17 ug/L chronic level, was in sharp contrast to the remaining samples taken during the April-September 2001 study (av. sample <0.01 ug/L).

However, by comparison, several other subsegments demonstrated similar spikes relative to overall samples during the segments and were not included for proposed delisting. For example, the Tensas River, subsegment #81201, demonstrated for DDT a one-time exceedance of 0.0024 ug/L, with an 0.001 ug/L chronic level, but averaged <0.001 ug/L for the other five months. For Carbofuran, the Tensas River segment demonstrated exceedances during the first two months of the six-month sample, 0.44 ug/L and 0.17 ug/L, with a 0.13 ug/L chronic level, but averaged well below the chronic level for the remaining four months, averaging <0.031 ug/L.

Big Creek, subsegment #80903, demonstrated a similar pattern in exhibiting a one-time exceedance with Carbofuran and Methyl Parathion followed by samples well below established chronic levels for those chemicals.

As stated above, such facial inconsistencies, in the absence of explanation or guidance, suggests that Bayou Louis was inexplicably proposed for delisting despite an exceedance similar in scope to other sites that are not proposed for delisting.

Response: *This comment specifically targets the methodology used for assessing whether or not a waterbody was impaired. The methodology used comes from the EPA Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement (September 1997). It was applied*

as follows: Once numeric targets were established, and data collection was complete, the most recent three years (May 1998 to June 2001) of data from each of the three data sets were reviewed with respect to the LDEQ established water quality standards, EPA proposed water quality criteria or calculated numeric target values. Exceedances of either the acute or chronic numeric target values were noted for each impaired water body. If a pesticide concentration did not exceed its numeric target value or standard more than once in a three-year period, the water body was considered to be fully supporting. If a pesticide concentration exceeded its numeric target value or standard two or more times during a three year period, the percentage of samples in which this occurred was used to further assess the water body as either partially supporting or not supporting with regard to the pesticide of concern. Water bodies identified as partially supporting or not supporting require a TMDL.

Therefore, for Bayou Louis and any other segments for which only one exceedance occurred for a particular pesticide during the three year period, those subsegments were considered to be fully supporting and TMDLs were not needed.

Specific Comments: Data Results for Toxaphene

Toxaphene results from EPA's Pesticide Study indicate that the reporting limit for toxaphene is 0.060 ug/L. Under applicable Louisiana regulations, where, as here, chronic-level criteria are below the detection limit, no detectable concentrations are permitted. LAC 33:IX.1113.C.6(e). Accordingly, for example, Bayou Macon, subsegment #081001, recorded a one-time exceedance of 0.0697 ug/L and was, therefore, not proposed for delisting.

Among the segments proposed for delisting, however, recorded data suggests 37 similar exceedances that were not recorded as such. Every one of the eligible segments demonstrated Toxaphene amounts at <0.061 ug/L, with some recording as high as <0.062 ug/L. Applying "the most stringent criteria," such readings leave open the possibility that detectable concentrations above the reporting limit exist and, therefore, render the segment in exceedance.

Because Toxaphene is a toxic chemical and, as stated earlier, the reporting limit is already several hundred times greater than chronic concentrations, ambiguity as to reported data should not be read to support delisting. Indeed, if there is any doubt it is an abuse of discretion to delist where data does not indicate clear compliance with WQSs. Thirty-seven samples where an excess of reporting limits is clearly possible, and for many segments occurring 3-4 months successively, is ample evidence that reliably safe levels of Toxaphene have not been determined. As a means of censoring for data contamination, estimates of <0.062 and <0.061 are not reasonable given that actual measures of 0.061 and 0.060 ug/L would represent high concentrations. Moreover, such

adjustments in 37 of the 72 samples for proposed delisting segments is a high frequency of censoring.[3]

Given the high bar established for toxic substances, for EPA to treat measurements of <0.062 and <0.061 ug/L as equal to the reporting limit, <0.060 ug/L, is arbitrary and capricious. In this light, to recommend that these segments be delisted for Toxaphene is an abuse of discretion.

Response: *It is not uncommon for laboratory detection levels to vary slightly from sample to sample due to qualities that are specific to each sample. All values in the table with a < sign before them are considered as "not detected" at the numeric level provided. Referring back to LAC 33:IX.1113.C.6(e), no detectable concentrations are permitted and on these dates associated with a no detect, a subsegment is considered to be meeting the WQS. See previous comment.*

A TMDL was written for the Tensas River for both DDT and toxaphene due to a fish advisory for both. A TMDL was also written for DDT and toxaphene for the Boeuf River due the number of exceedances of the WQS criteria for DDT and toxaphene. The endpoint target for DDT and toxaphene in fish advisories is the reduction of fish tissue contaminant concentration to levels that constitute an acceptable risk to fish consumers, allowing LDHH to remove the advisory on fish consumption in the Tensas River. According to LDEQ (1998), "the Office of Water Resources (OWR) does not maintain a regular fish tissue monitoring program. However, fish are frequently sampled in response to significant complaints, as a result of enforcement action, or in response to other problems as they occur." The fish advisory for the Tensas River has been in effect since February 1992 without further review. Because DDT and toxaphene are known to accumulate in the sediments and tissues of fish, it is recommended that fish tissue samples be collected from the Tensas and Boeuf Rivers over the next three years to determine if the fish consumption advisory on the Tensas River initiated in February 1992 is still necessary and if additional fish advisories need to be established for DDT and toxaphene for the Boeuf River.

Thank you for your consideration of these comments.

Very truly yours,

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[3]See Jeffrey D. Martin, USGS, *"Quality of Pesticide Data for Environmental Water Samples Collected for the National Water-Quality Assessment Program, 1992-96 and Examples of the Use of Quality-Control Information in Water-Quality Assessments,"* October 27, 1999, available at http://ca.water.usgs.gov/pnsp/rep/qcsummary/#contam. ("The validity of adjusting concentrations for contamination should be evaluated in view of (1) typical magnitudes of contamination in field blanks, (2) the frequency of censored environmental detections compared to the estimated frequency of contamination, and (3) the ability of the adjusted data to address particular types of assessment questions.")

Working to Protect and Preserve the Gulf of Mexico
839 St. Charles Ave., Suite 309 New Orleans, LA 70130
Mailing Address: P.O. Box 2245 New Orleans, LA 70176
Phone: (504) 525-1528 Fax: (504) 525-0833
www.gulfrestorationnetwork.org

Jeffrey Thomas
Esther Boykin

JT:kf

[via e-mail]

March 18, 2002

Ellen Caldwell
Environmental Protection Specialist
Water Quality Protection Division
U.S. EPA Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Proposed de-listings of 150 waterbody/pollutant combinations from the Louisiana 303(d) list (Federal Register 02/14/02; Volume 67, No. 31, pages 6922-25).

Dear Ms. Caldwell,

On behalf of the Gulf Restoration Network (GRN) I submit the following comments regarding the proposed delisting of 150 waterbody/pollutant combinations in the Calcasieu and Ouachita River Basins, which is the subject of a recent federal register notice by your agency. The GRN is a diverse coalition of 47 local, regional, and national organizations concerned about the short and long-term health of the Gulf of Mexico, and committed to restoring it to an ecologically and biologically sustainable condition. Members of the GRN are located in each of the states along the Gulf of Mexico.

The GRN has serious concerns regarding the U.S. Environmental Protection Agency (EPA) and Louisiana Department of Environmental Quality's (LDEQ) efforts to address water quality problems in these watershed basins in the State of Louisiana. Specifically, we have the following concerns with the timing of the delisting notice and the associated public comment period, and the rationale provided by LDEQ to support the delistings of these 150 waterbody/pollutant combinations.

I. Inadequate time for members of the public to provide thorough, meaningful comments on the proposed delisting actions.

The federal register notice announcing the availability for comment on the proposed delisting actions was published on February 14, 2002. Due to the extraordinarily large number of delistings, in combination with the wide variety of pollutant parameters proposed for delisting, the GRN submitted a letter requesting an extension of the public comment period. However, via an email from your agency on March 14, 2002, we were informed that an extension of the comment period would not be available (see attached email).

It is worth pointing out that, according to the Louisiana TMDL schedule included in the Memorandum of Understanding (MOU) between your agency and Louisiana Department of Environmental Quality, signed by your agency on June 2, 1997, TMDLs in the Calcasieu and Ouachita River Basins were supposed to be completed by December 31, 2001Cnearly 3 months ago. EPA Region 6 should have anticipated a high level of interest in an action that affects such a large number of waterbodies. We hope that, in the future, better planning of public comment periods is made a priority in order to ensure that enough time is available for the public to submit all relevant, new information that should be considered in EPA's final decision.

Response: *EPA appreciates your comment. As you stated, a request for an extension of the comment period was received and we would have been willing to grant your request, had we been able to reach an agreement with plaintiffs to grant an extension of the court ordered due date. Unfortunately we were unable to reach accommodation on this issue and were unable to grant your request. EPA will consider offering extended comment periods when warranted in future actions.*

Comments II through VI refer directly to a September 24, 2001 letter submitted by Robert P. Hannah of LDEQ to Mr. Sam Becker of EPA Region 6 (hereafter DEQs letter); this letter serves as Attachment A in the delisting information included on EPAs website.

II. Insufficient time to request raw data associated with delisting proposal.

On page 2 of DEQs letter, DEQ states that a disk containing data summaries and assessments of all subsegments located in the Calcasieu and Ouachita Basins, an excel spreadsheet containing raw conventional data, and an excel spreadsheet containing raw fecal coliform data was attached to the letter. While some raw data for pesticide concentrations, and limited data for TSS and Turbidity measurements were included in the attachments included on EPAs website, no data summaries, conventional raw data, or raw fecal coliform data were included for the public to review.

Because this data is of great importance when evaluating delisting rationale, it should have been made available to the public on EPAs website. Without this data, and the additional time needed to request this data, comments submitted by our organization are

not as thorough as they could be. We request that in future delisting notices, raw data be posted on the website with other materials such as data summaries, letters of explanation, etc. for the public to review.

Response: *Your comment is reasonable and valid. We did provide a summary of the available data, but in the future we will provide access to any specific data that is not otherwise available. We would like to point out that our website does have a link to the Louisiana Ambient Water Quality Database where the raw data used to evaluate these waters is stored. We will not routinely provide data that is directly available from this website. However, we will consider individual requests if there are circumstances that do not permit access through this source.*

III. Up to 52 additional waterbody/pollutant combinations may be added to the 303(d) list.

Table 1 in DEQs letter designates 52 waterbody/pollutant combinations as ANOL@ (Not on the Court Ordered Section 303(d) list). However, there is no mention of whether the water quality assessment completed in 1999, on which this table is based, indicated that these criteria are supported for the waters designated use. Although DEQ has publicly announced that it intends to delist as many waters as possible over the next listing cycle, DEQ is obligated to add waterbodies to the list that are not currently meeting water quality standards.

Response: *These actions directly address waters from the 1999 Court-ordered 303(d) list. We agree that the goal is not to delist waters but to assure that all waters are addressed and that the appropriate action is taken. In a separate action noticing TMDLs developed in these basins and currently available for comment, TMDLs have been developed for a number of newly identified waterbody/pollutant pairs. In these cases since TMDLs were developed there is no need to add them to the list.*

IV. Justification for delisting of pathogens for subsegment 080401 is not provided.

On page 7 of DEQs letter, justification for delisting of five subsegments in the Calcasieu Basin and three subsegments in the Ouachita Basin is provided. However, a fourth subsegment in the Ouachita Basin, subsegment 080401, which EPA is proposing to delist for pathogen contamination is not included in this discussion, nor is a summary of the data supporting this delisting included in Table 3 of the letter.

We assert that the rationale for delisting of this subsegment included in the Ouachita Delisting Summary is adequate. Data documenting the EPAs assertion that 25% of the monitoring data exceed primary contact criteria and 14% of the data exceed secondary contact criteria need to accompany this delisting proposal. Since the rationale for delisting this subsegment for pathogen contamination is not supported by facts, we request that EPA Region 6 not approve the delisting of this waterbody/pollutant combination.

Response: *EPA individually reviews all proposals for delisting submitted by the state. Data supporting the delisting for subsegment 080401 is readily available from the LDEQ ambient water quality database. In our review, we determined that an error had been made in the LDEQ evaluation. The result of correcting this error was that the waterbody was found to be meeting WQS for fecal coliform and was appropriately proposed for delisting.*

The State is required to submit to EPA the methodology they used to assess their waters. LDEQ publishes its assessment methodology in the 305(b) report, the last published 305(b) report was in April 2000. This report is available by clicking on the LDEQ website. EPA does not have authority to approve this methodology but we do review it to assure that it is consistent with EPA guidance and regulations. EPA has reviewed the LDEQ assessment methodology and finds that it is consistent with Region 6 guidance and EPA guidelines and regulations.

V. Proposed delistings of all subsegments for pathogen contamination must be withdrawn.

On page 8 of DEQ's letter, a description of the water quality standards for fecal coliform bacteria is provided. It is, however, unclear where these standards originated. In the latest version of Louisiana's water quality standards (revised as of December 31, 2000), the bacteria criteria for primary contact recreation are stated as follows:

Based on a minimum of not less than five samples taken over not more than a 30-day period, the fecal coliform content shall not exceed a log mean of 200/100 mL, nor shall more than 10 percent of the total samples during any 30-day period or 25 percent of the total samples collected annually exceed 400/100 mL. These primary contact recreation criteria shall apply only during the defined recreational period of May 1 through October31. During the nonrecreational period of November 1 through April 30, the criteria for secondary contact recreation shall apply (emphasis added).[4]

In DEQ's letter, DEQ states that a waterbody is considered impaired "if greater than 25% of the samples do not meet the respective PCR and SCR criteria." However, according to the criteria quoted above, for a waterbody to be considered clean, no more than 10% of the total samples taken during any 30-day period and 25% of the total samples collected annually can exceed 400/100mL. Thus, the criteria cited by DEQ in its letter to EPA is not at all consistent with the criteria adopted by the state of Louisiana and set forth in the State's water quality standards.

[4] Environmental Regulatory Code. Part IX: Water Quality. 2001. State of Louisiana. Department of Environmental Quality. Page 55.

In addition, in order to prove that the waterbodies proposed for delisting are currently meeting water quality standards, at least five samples over a 30-day period are necessary for the evaluation of both the log mean and instantaneous maximum portions of the criteria. Since it is explicitly stated in DEQ's letter on page 7 that fecal coliform samples for these subsegments were collected on a monthly basis, it is impossible for DEQ to prove that either the log mean or instantaneous maximum portions of the primary (or secondary) contact recreation criteria are not being violated in the nine subsegments for which DEQ is proposing delisting for pathogen contamination. The GRN requests that EPA withdraw subsegments 030301, 030302, 030401, 030402, 030901, 080401, 080904, 081501, and 081609 from consideration for delisting. Especially considering the high fecal coliform values (up to 16,000 MPN/100 mL in some instances) reported in Table 3 of DEQ's letter, we request that a TMDL be developed for each of these waterbodies and future monitoring take place in such a way that adequate data is available (i.e. at least five samples within a 30-day period) to support a delisting decision.

Response: *In 1997 EPA convened a workgroup of Region 6 and state representatives to review and address the requirements for meeting recreational use requirements. As a result of this workshop Region 6 issued a revision of section 3.3.2 from the document Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) reports and Electronic Updates: Supplement (EPA 0841-B97-002B). This revision stated that Region 6 states may use the following approach, based on total samples, in determining primary contact recreational use support:*

A. Fully Supporting:

For E. coli or enterococci: Geometric mean met and/or single-sample criterion not exceeded during the recreational season, or

For fecal coliform: Geometric mean met - geometric mean of the fecal coliform bacterial level should not exceed 200 colonies per 100 ml based on at least five samples in a 30-day period and/or less than or equal to 25 percent of samples exceed 400 colonies per 100 ml.

B. Not Supporting:

For E. coli or enterococci: Geometric mean not met; single-sample criterion exceeded during the recreational season, or

For fecal coliform: Geometric mean not met and/or more than 25 percent of samples exceed 400 colonies per 100 ml.

LDEQ has cited this regional policy in establishing their assessment methodology for recreational uses.

VI. Criteria definitions provided by DEQ are inconsistent with the criteria included in Louisiana's Water Quality Standards

The following criteria definitions included in DEQ's letter to your agency are inconsistent with Louisiana's Water Quality Standards:

- Criteria for salinity, TDS, chlorides, and sulfates. On page 9 of DEQs letter, it is stated that a waterbody is considered impaired if a greater than 30% of samples for one or more parameters [salinity, TDS, chlorides, or sulfates] exceed designated criteria.@ However, this definition is inconsistent with the criteria for these parameters included in Louisiana's Water Quality Standards.[5] We request that EPA further investigate the origin of this criteria as well as the period of time to which it refers (i.e., 30% of samples taken during a 30-day period or a year-long period?).

- Criteria for Turbidity. On page 12 of DEQ's letter, it is stated that an Outstanding Natural Resource waterbody is considered impaired if a greater than 10% of the samples exceed the numerical criterion of 25 Nephelometric Turbidity Units (NTU)." It is also stated that all other waters are considered impaired if a greater than 30% of the samples do not meet the specified criterion.@ However, this definition is inconsistent with the criterion for this parameter included in Louisiana's Water Quality Standards.[6] We request that EPA further investigate the origin of this criteria as well as the period of time to which it refers (i.e., 30% of samples taken during a 30-day period or a year-long period?).

- Criteria for pH. On page 12 of DEQ's letter, it is stated that a waterbody is considered impaired if "greater than 30% of samples fall above or below the stated maximum or minimum criteria." However, this definition is inconsistent with the criteria for these parameters included in Louisiana's Water Quality Standards.[7] We request that EPA further investigate the origin of this criteria as well as the period of time to which it refers (i.e., 30% of samples taken during a 30-day period or a year-long period?).

Response: *EPA guidance for assessing compliance with aquatic life use support for conventional physical/chemical methods is found in Guidelines for Preparation of the Comprehensive State Water Quality Assessments (303(b) Reports and Electronic Updates: Supplement (EPA-841-B97-002B, 1997). This guidance establishes that a Not Supporting determination can be made based on percentages of criteria exceedances. This guideline document suggests that waters be assessed as not supporting if >25 of the samples exceed the criterion. As previously stated EPA does not have authority to approve assessment methodologies. These interpretations of the state's water quality standards are at the discretion of the state as long as they are*

[5] Environmental Regulatory Code. Part IX: Water Quality. 2001. State of Louisiana. Department of Environmental Quality. Page 54.
[6] Ibid. Page 53.
[7] Ibid. Page 54.

found to be consistent with EPA regulations and guidance and are reasonable. EPA Region 6 has determined that the LDEQ assessment methodology for salinity, TDS, chlorides, and sulfates establishing a 30% exceedance rate is consistent with this guideline.

The period of record used in Louisiana assessments is all data from the most recent five years. The period defined in the Louisiana letter and used in all assessments for this correspondence is 1996 through 2000.

VII. Justification for removing salinity impairment is inadequate.

Currently, no criterion for salinity exists for Louisiana waters. As stated in Attachment E, included on EPAs website for public review, DEQ is proposing to combine salinity and TDS-impaired waters into a single listing. However, DEQ does not provide substantial evidence to prove that this consolidation of listings is warranted. DEQ notes that salinity measurements were originally used to estimate the mass of dissolved solids. The question remains, however, if TDS measurements provide a good estimate for salinity concentrations. Further investigation of the relationship between TDS and salinity measurements needs to be undertaken to ensure that separate listings aren't required. We request that EPA 1) not combine the salinity and TDS listings and 2) not delist the 11 water subsegments in the Ouachita River Basin listed for salinity until this relationship is better understood.

Response: *Louisiana has not adopted separate criterion for salinity. In part, to protect from unwanted salinity increases the state has adopted stream specific TDS criteria. According to Standard Methods 18th edition (APHA 1992) the measure of salinity was originally conceived as an indirect expression of the mass of dissolved salts in a given mass of solution. Total dissolved solids (TDS) is expressed as the mass of dissolved solids in a given mass of solution. Salinity was therefore developed as a quick and efficient indirect method of expressing this mass of dissolved solids (i.e. TDS). EPA Region 6 therefore proposes that there not be a separate listing for salinity but that salinity and TDS be combined as a single listing. EPA has been applying the following rationale for combining TDS and salinity listings since the fall of 2000. The relationship between salinity and TDS is very well understood and requires no additional study.*

VIII. Delisting of subsegment 080202, Bayou Louis, for pesticide contamination is unjustified.

DEQ is proposing to delist subsegment 080202, in the Ouachita Basin, for pesticide contamination. However, according to raw pesticide data taken by DEQ in August of 2001 and available on EPA's website in Attachment **, this water subsegment is in exceedance of the numeric target for the pesticide Methyl Parathion. In particular, data show that levels of 0.31 ug/L of this pesticide were present in the water during August of 2001. The chronic numeric target is listed

as 0.17 ug/L. We request that EPA not approve the delisting of subsegment 080202 for pesticide contamination based on this data that indicate an exceedance of water quality standards.

Response: *EPA guidelines for assessing compliance with criterion for toxic pollutants is provided in section 3.3.4 of the document " Guidelines for Preparation of the Comprehensive State Water Quality Assessments (303(b) Reports and Electronic Updates: Supplement (EPA-841-B97-002B, 1997)." This guideline states that a waterbody may be found to be Fully Supporting if: for any one pollutant, no more than 1 exceedance of acute criteria within a 3-year period based on grab or composite samples and no more than 1 exceedance of the chronic criteria within a 3-year period based on grab or composite samples.*

This guideline was followed in assessing all pesticides data. A more complete discussion of the assessment methodology and the process for setting pesticide targets may be found in the pesticide TMDL document Mermentau and Vermilion-Teche River Basin TMDLs for Carbofuran.pdf .

IX. Historical data is inadequate rationale for delisting of waterbody.

The use of historical data to justify delisting of a waterbody is inappropriate. Waters for which new data demonstrate that water quality standards are currently being met are candidates for delistings. However, historical data is not reflective of recent changes in development, land use patterns, aging sewage infrastructure that have a large impact on the quality of nearby rivers and streams. The use of historical data to justify delistings was used for 37 of the waterbody/pollutant combinations proposed by your agency. We question the accuracy of that data in reflecting the current status of water pollution in the Ouachita and Calcasieu River Basins.

In addition, it seems logical that, in some cases, this historical data was the data used to list these waters in the first place. It does not make sense that this same data be used to delist these waters (i.e., were models used to reanalyze these data and conclude that standards are expected to be met?). We request that EPA does not approve delisting for these 37 water subsegments until new water quality data is collected that indicates no impairment of water quality standards.

Response: *We apologize for the confusion created by the use of the term historical. All delisting determinations were made based on data that was not previously considered in establishing the court-ordered list. Data used for determining current status was collected during the years 1997-2000.*

The term" historical" was an attempt to describe data that was not previously assessed, but was collected before the 2000 court-ordered list was established. For example, the court-ordered list included listings from the 1998 305(b) assessment. This 1998 assessment was created using data from 1993 through

1997. In this case, data collected in 1998 and 1999 was not used in developing the court-ordered list even though it was collected prior to the establishment of the list. This data was referenced as historical as apposed to data that was clearly collected after the establishment of the court-ordered list. This data was referred to as new data. There was no reanalysis of data that was previously used. We will remove the word historical from our delisting justification documents to eliminate any confusion.

X. Data source for dioxin for subsegment 080101 represents a conflict of interest.

In the report entitled

"Data assessment for Water Bodies in the Ouachita River Basin Listed for Dioxin on the Louisiana 303(d) List," it is stated on page 14 that the data used to determine Georgia Pacific's discharge of dioxin into a section of the Ouachita River upstream of subsegment 080101 was collected by Georgia Pacific (GP). The data submitted by GP to the Arkansas Department of Environmental Quality indicates that there are no detectable levels of dioxin in their effluent discharge.

While this data may be accurate, there is no independent data available to verify that there are no point source contributions of dioxin to subsegment 080101 of the Ouachita River. We believe that reliance on data collected and reported by a point source contributor constitutes a conflict of interest. This data alone should not be used to justify the delisting of subsegment 080101 for dioxin and other priority organics.

Response: *EPA's NPDES program is based on self monitoring and reporting by permitted facilities. This data was collected under a QA/QC plan that was reviewed and approved by EPA. Since 1991, fish tissue samples are analyzed annually as part of Georgia Pacific's permit requirements. Georgia Pacific's fish collection efforts followed standard EPA methods and lab analysis of fish tissue was conducted by Triangle Labs. Although the fish were all collected in Arkansas, they were considered to be representative of Subsegment 080101 because they were collected immediately upstream of Subsegment 080101 and there are no significant dischargers affecting that stretch except for the Georgia Pacific mill. See previous response under Earthjustice.*

XI. Justification for delisting of subsegment 081203 for nutrients is inadequate.

DEQ is basing this delisting on data that show this waterbody is meeting DO criteria for its designated use. However, this DO data is identified as "historical data." Before this delisting can be fully justified, new data that accurately reflect the status of DO levels in this waterbody need to be collected in order to account for recent developments and other land use changes that may have significantly impacted DO levels in this lake.

Response: *We apologize for the confusion created by the use of the term historical. As previously described we used the term historical if the water quality station used in the assessment had an extended period of record before the1998 basin survey. As explained previously the period of record for assessments was the five year period from 1996 through 2000.*

XII. Justification for delisting of subsegment 080301 for unknown toxicity is inadequate.

The rationale provided by DEQ for this delisting is purely qualitative. It is essential that quantitative data be used to prove that toxicity levels in subsegment 080301 do not constitute a violation of water quality standards.

Response: *Both qualitative and quantitative data have been used to establish the court-ordered list. Therefore, it is appropriate that in some cases where only qualitative information was the basis for the listing, and if it can be shown that the basis for that listing was not appropriate, the listing can be removed using qualitative data. According to LDEQ records in this case, the original listing for unknown toxicity was based on a short-term fish kill episode, no any specific toxicity testing information was collected or evaluated. As described in the LDEQ letter, the fish kill was later attributed to low DO conditions. Quantitative data from this waterbody was used to demonstrate that DO concentrations in this stream are currently fully supporting the criterion.*

XIII. Many of the delisting proposals described in Attachment C (October 10 letter from DEQ to EPA Region 6) are not included in the delisting summary.

Many of the subsegments proposed for delisting in DEQ's October 10 letter to EPA Region 6 are not included in the delisting summary posted on EPAs website. For example, in this letter DEQ proposes to delist eight subsegments in the Calcasieu River Basin for priority organics. However, these delistings and their accompanying rationale are not included in the Calcasieu Delisting Summary. This is true for several other subsegments in both the Calcasieu and Ouachita River Basins that are included in DEQ's October 10 letter to your agency. We request that these proposed delistings, as well as the rationale for delisting, be available for public comment prior to EPA's decision regarding the approval of these delistings.

Response: *These subsegments were either not approved for delisting by EPA and require a TMDL or in the case of the Calcasieu subsegments, the rationale for delisting is included separately in the document Draft Total Maximum Daily Load for Toxics for the Calcasieu Estuary. This document is on the EPA website and is currently out for review.*

Thank you for your full consideration of these comments.

Respectfully submitted,

[via e-mail]

Cynthia Goldberg
Gulf Restoration Network

KEAN, MILLER, HAWTHORNE, D'ARMOND, McCOWAN & JARMAN, L.L.P.

ATTORNEYS AT LAW

BATON ROUGE TWENTY-SECOND FLOOR TELEPHONE: (225) 387-Q999 NEW ORLEANS ONE AMERICAN PLACE FACSIMILE: (225) 388-9133 COVINGTON BATON ROUGE, LOUISIANA 70825 www.keanmil1er.com

LAKE CHARLES MAILING ADDRESS PLAQUEMINE POST OFFICE BOX 3513 BATON ROUGE, LOUISIANA 70821-3513 M. DWAYNE JOHNSON
PARTNER
Direct Dial: (225) 382-3415

March 15 2002 dwayne.johnson@keanmiller.com ,

Ms. Ellen Caldwell
Environmental Protection Specialist
Water Quality Protection Division
United States Environmental Protection Agency
Region 6
1445 Ross Ave.
Dallas, TX 75202-2733

VIA FEDERAL EXPRESS

Re: Comments of the Louisiana Chemical Association regarding Proposed Determinations that TMD Ls are Not Needed Louisiana: Calcasieu River Basin/Ouachita River Basin 67 FR 6923 (February 14, *2002)*

Dear Ms. Caldwell:

Our Firm represents the Louisiana Chemical Association ("LCA "), which has asked us to provide these comments on its behalf on the above-referenced proposed determinations that total maximum daily loads ("TMDLs") are not needed for certain waterbodies within either the Calcasieu River Basin or the Ouachita River Basin in Louisiana (the "Proposed Determinations"). LCA appreciates the opportunity to provide these comments on the Proposed Determinations.

LCA is a nonprofit Louisiana corporation, composed of 76 members located at over 105 plant sites in Louisiana. Each such plant site has wastewater discharges subject to the NPDES program, either directly or as delegated to the State of Louisiana. Further, several LCA members have facilities with discharges within the either the Calcasieu River Basin or the Ouachita River Basin.

LCA requests that these comments be placed into the administrative record for the Proposed Determinations. LCA further requests that EP A acknowledge receipt of LCA' s comments by stamping the attached copy thereof with the filing information and returning it to LCA in the enclosed self-addressed, stamped envelope. LCA's comments on the Proposed Determinations follow.

LCA COMMENTS ON PROPOSED DETERMINATIONS

1. General--Incorporation of Other Comments.

LCA hereby adopts and incorporates by reference those comments on the Proposed Determinations made by members of LCA, the American Chemistry Council, and/or The Fertilizer Institute to the extent such comments are not inconsistent with the comments made herein by LCA.

2. General--Support of Proposed Determinations.

LCA fully supports the Proposed Determinations. LCA agrees with EP A that the water quality standards are being met for the relevant receiving waterbodies within the Calcasieu River Basin and the Ouachita River Basin; that is, such waterbodies are meeting their designated uses and the numerical and/or narrative criteria applicable to them. Thus, TMDLs are unnecessary for such waterbodies and should not be prepared.

LCA welcomes further review and dialogue with EPA personnel in light of the significant impact the Proposed Determinations may have on industry. Should you have any questions regarding the written comments of LCA, please do not hesitate to contact Henry T. Graham, Jr., LCA's Director of Legal and Environmental Affairs, at (225) 344-2609.

Thank you for all of your assistance and cooperation.

Very truly yours,

M. Dwayne Johnson

MDJ/sk

cc: Mr. Henry T. Graham, Jr.

BOGALUSA'MILL

Gaylord Container Corporation
P.O. Box 1060
Bogalusa, Louisiana 70429-1060
504 732 8000

February 22, 2002

Ms. Ellen Caldwell
Environmental Protection Specialist
Water Quality Protection Division
U. S. Environmental Protection Agency
Region VI 1445 Ross Avenue
Dallas, TX 75202-2733

Dear Ms. Caldwell:

Gaylord Container Corporation Bogalusa Mill appreciates the opportunity to comment on U.S. Environmental Protection Agency's February 14, 2002 determination concerning TMDL's (Total Maximum Daily Load) for various constituents and water bodies in Louisiana.

Specifically, Gaylord Container supports EPA's proposed determination that 150 TMDL's for water body/pollutant combinations are not needed based on the analysis of new data and information. We understand that current data and information shows that water quality standards are being met in the referenced water bodies. In addition to supporting the current proposed determinations for 150 TMDL's, we recommend that all of the court ordered TMDL's (Sierra Club et al, V. Clifford et al, No. 96-0527) be evaluated or reevaluated based upon the most current and statistically defensible data.

We recently investigated the output of a water quality model calibration using data of marginal quantity and quality. The overly conservative assumptions employed to utilize such data create stringent TMDL's that have the potential to further stress the economic viability of manufacturing facilities and other commercial activity throughout Louisiana. Point source dischargers required to meet stringent TMDL's based upon marginal data and resulting conservative modeling assumptions would require overly extensive augmentation to existing wastewater treatment facilities. Such superfluous augmentation amounts to a cost without environmental or other benefit.

In keeping with our commitment to the application ot sound science and best available modeling expertise we recommend several standards for all model calibrations that would generate TMDL's that would impact either point sources or non-point sources:

1. Adopt the practice of calibrating a model to conservative constituents as a precursor to calibration to non-conservative BOD/ dissolved oxygen.

2. Use only field verified parameters for time of travel and other physical descriptions of the receiving screen. The compound effects of errors in physical parameters such as velocity, depth, width and aeration gives rise to

the use of unrealistic and unsubstantiated values for organic decay rates in order to fit or calibrate the model results to in stream oxygen measurements.

3. Use only site specific reaeration rates and measured instream kinetic parameters for BOD and SOD degradation rates. Failure to use site and field specific rates reduces the model calibration to mathematical curve fitting in order to duplicate observed oxygen values.

4. Replace the use of sediment oxygen demand as the primary calibration factor. The impact of SOD on model predicted dissolved oxygen is so large that this parameter needs to be determined rather than inappropriately used as a calibration factor.

5. Adopt the practice of model verification as a concluding step in the calibration process. A model that successfully predicts observed conditions resulting from changed inputs is significantly more credible than an unverified model.

Gaylord Container supports EPA's goal to establish appropriate and reasonable water quality standards throughout Louisiana. Furthermore, we are committed to the application of sound science based upon statically sufficient valid data for the development of TMDL's to achieve water quality standards. We appreciate the opportunity to comment on these proposed determinations.

Sincerely,

Charles W. Stahr, P. E.
Technical Manager
Gaylord Container Corporation
Bogalusa Mill Division

Response: *EPA acknowledges your comments and reaffirms that we are committed to developing and utilizing the best information possible for water quality modeling. We do have to acknowledge however, that while this modeling information is desirable, other factors often preclude the collection of all of the information needed to develop a model. Under these circumstances EPA believes that models using the available hydraulic information and water quality data are appropriate and that these TMDLs are valid.*